

CHAMBERS'S JOURNAL

OF
POPULAR

LITERATURE, SCIENCE, AND ART.

Fourth Series

CONDUCTED BY WILLIAM AND ROBERT CHAMBERS.

No. 585.

SATURDAY, MARCH 13, 1875.

PRICE 1½d.

THE TRANSIT OF VENUS.

A TRANSIT of Venus is, in itself, by no means a very striking phenomenon; to the common eye, it is much less so than an ordinary eclipse of the sun or moon. It requires a telescope to see it; and all that is to be seen, even then, is a black spot, about the size of a pea, moving slowly over the bright face of the sun. It must have been something more than the expectation of this as a mere wonderful sight, that kept the scientific world on the *qui vive* for the last two or three years, and led to such extensive preparations for witnessing it. There were long and earnest discussions among astronomers as to the best stations for seeing it; special apparatus of the most delicate and costly kind were constructed; and bands of astronomers with their assistants trained themselves for months beforehand, by practising the art of observation on an artificial model of the transit; thus rehearsing, as it were, their several parts before the great event of the 9th of December 1874 should come off. More than this, the leading governments of the civilised world, one and all, voted liberal funds for defraying the necessary expenses and transporting these corps of drilled observers to a multitude of stations distributed all over the eastern side of the globe. Even a private individual, Lord Lindsay, has spent what would be to most people a considerable fortune in equipping at his own expense an observing expedition to the island of Mauritius.

The interest attaching to the transits of Venus, which has thus been so strikingly manifested, arises from the circumstance, that when they occur, which is rarely, they are available for solving, more accurately than can be done in any other way, the grand and fundamental problem of astronomy—the measurement of the sun's distance from the earth. All other celestial measures are deduced from this; and if there is error here, there is error everywhere. No wonder, then, that astronomers should have been anxious to make the most of the recent occasion. The final result of the observations taken on the 9th of December cannot be

known for months to come. The observers have to be brought back, literally from the ends of the earth, and their separate observations have to be carefully discussed and compared, before a definite conclusion can be arrived at. In the meantime, while the interest is yet fresh, we propose, for the benefit of those who are not astronomers, to give a general notion of how a transit of Venus comes to be of so much use in the problem of planetary distances.

We may observe at the outset, that although the absolute distances of the planets from the sun are difficult to determine exactly, their relative distances are readily measured. By observing the angle made between Venus and the sun when the planet is at its greatest elongation, we get all the angles of the right-angled triangle formed by the earth, the sun, and Venus; and thus, by one of the simplest rules of trigonometry, we know the *proportion* between the distances, though not the distances themselves. If the distance of the earth from the sun be called 1'00, that of Venus is found to be 0.72, or about seven-tenths; similarly, the distance of Neptune is known to be 30 times that of the earth; and so with the rest of the planets. If, therefore, we can find in any way the absolute distance in miles of any one planet, say that of the earth, these ratios will give us the rest by a simple process of multiplication.

In order to understand how a transit of Venus helps to determine the sun's distance, it is necessary to consider the general principle of astronomical mensuration. The procedure is the very same as in determining the distance of an inaccessible object on the earth. Suppose that a surveyor wishes to know the distance of a rock, R, at sea, from a point, A, on the shore; he chooses another station, B, along the shore, and measures the distance between the two; this forms his 'base-line,' which we will suppose to be 100 yards long. He then measures with a theodolite the angle at A contained between the direction of B and the direction of the object R; and in the same way, the angle contained at B. He has now enough 'data,' as it is called, to calculate the

length of AR, or of BR. He may even find it mechanically, without calculation. He has only to lay down on paper a line, AB, equal to 100,



from a scale of equal parts, and, by means of a graduated circle, to make angles at A and B equal to the observed angles, and the meeting of the two lines on the paper will determine a point R, the distance of which from A, measured by the scale, will give the actual distance in yards of the rock from the station. This mechanical way of finding distances does not admit of great accuracy; but wherever we have data for drawing lines fixing the relative positions of objects on paper, trigonometry enables us, in ordinary cases, to calculate the actual distances with great exactness.

We have said, in ordinary cases; because there are cases in which exactness is very difficult to attain, namely, when one of the sides of the triangle is very small in relation to the others; with a short base-line, a small error in measuring the angles at the base makes a vastly greater error proportionally in the lengths of the opposite side. If, in the above case, with a base-line of a hundred yards, we suppose the rock to be ten or twelve miles off, and attempt to draw a triangle on paper representing these conditions, we find that the slightest variation of one of the angles at the base makes the crossing-point, R, of the longer sides approach or recede by a great distance. Such a triangle is said by mathematicians to be 'ill-conditioned,' or unfavourable to exact determination. Now, the triangles with which astronomers have to do in determining celestial distances are, as a rule, very ill-conditioned indeed. The longest base-line possible is that between two stations at opposite points of the globe, or 8000 miles. From this it is possible to determine with tolerable nearness the distance of the moon, which is only about 30 times 8000; but when it is applied to the planets and sun, where the distances are thousands of times the length of the base-line, the result cannot be depended on within a considerable percentage of the whole. Hence the necessity of having recourse to expedients by which the problem is attacked indirectly. The most trusted of these expedients is that furnished by the transits of Venus. But before describing how they are used, we may glance first at the results hitherto arrived at.

As early as the third century before Christ, Aristarchus, a Greek astronomer, essayed to measure the distance of the sun, but his means of observation and calculation were so defective, that he made it only about one-twentieth part of the true distance. No advance on this was made for many centuries. Even the great astronomer, Kepler, in the seventeenth century, could only say that the distance must be at least between 13 and 14 millions of miles. Subsequently, the estimates—for, owing to the imperfection of the methods and instruments, they were little better than estimates—gradually rose to 80 millions. At last, in 1716, Halley, the English astronomer, proposed a method of employing the transits of Venus. Accordingly, the next transits, in 1761 and 1769, were observed, with this view, at a

variety of stations. But the results at first deduced from these observations were so discordant among themselves, that little confidence was put in them. It was not till 1824 that the German astronomer, Encke, subjected the observations of 1769 to an elaborate and comprehensive 'discussion,' as astronomers call it, and arrived at the conclusion, that they gave a distance of about 95,300,000 miles; and this number, until quite recently, held its place in all books on astronomy as the true distance of the sun.

In the meantime, in the absence of transits, other methods of measurement, now become possible through the growing perfection of astronomical instruments, were tried; and all concurred in pointing to a value $3\frac{1}{2}$ millions of miles less than that stated above. This conclusion was singularly confirmed by Mr Stone of the Greenwich Observatory, and others, who, recurring to the observations of 1769, found that, by putting a juster interpretation upon some of the data than had been done by Encke, they gave a distance very nearly in accordance with the results of the later methods. All this has led to accepting 91,500,000 miles as the approximate distance of the sun. It is not anticipated that the value to be deduced from the recent transit will differ from this to any very great amount.

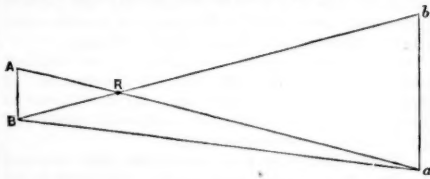
The object of the problem now engaging the attention of astronomers is often spoken of as being the determination, not of the sun's distance, but of the sun's *parallax*. Parallax is the technical name for the 'displacement'—for that is the meaning of the Greek word—which an object appears to suffer when the observer changes his place. If the rock we spoke of above lay due east (E) from A, it would, when looked at from B, lie some points or degrees north of east (E'); and this change of bearing, this deflection from the east direction, which is measured by the angle EBR, is exactly equal, as is evident at a glance, to the angle contained at R by the two lines, RA, RB. It is this angle, ARB, that is styled the parallax of the object R, as observed from A and B; it is the angular measure, the apparent length of the base-line as seen from R; and knowing this, and the actual length of the base-line, the distance of the object—supposing one of the angles at the base to be a right-angle or otherwise known—is easily calculated. In speaking of the parallax of the heavenly bodies, the base-line assumed is the radius of the earth, or 4000 miles; the actual stations of observation may not be that distance apart, but the resulting angle is always reduced to that standard for comparison. Thus, the parallax of the moon is the angle subtended at the moon by the earth's radius; it is found to be nearly one degree (1° , or the 90th part of a right angle)—a quantity measurable within a tolerable percentage. But the parallax of the sun, as deduced by Encke, was only $8''.5776$, while the other measurements alluded to gave an average of $8''.94$ ($1''$ is the 3600th part of 1°). This slight difference of a few tenths of a second of arc gives a difference in the distance, as we have seen, of $3\frac{1}{2}$ millions of miles. The difficulty attending the measuring of such minute angles may be conceived when it is stated that, on the graduated edge of a circle five feet in diameter, the length of a second of arc ($1''$) occupies only $\frac{1}{3600}$ th of an inch. And yet an error of this amount in the

angle involves an error of half a million miles in the calculated distance.—But, to return to the transit.

The reader, it may be assumed, has a general notion of the plan of the solar system, and knows that the planet Venus revolves round the sun in an orbit within that of the earth. Her time of revolution is shorter than the earth's, being accomplished in about two hundred and twenty-five days. In consequence of this difference, Venus comes every now and then into a line with the sun and the earth, at one time between the earth and the sun, which is called 'inferior conjunction;' at another, on the opposite side of the sun—'superior conjunction.' If the orbit of Venus were in the same plane with that of the earth, the planet would seem, at every inferior conjunction, to pass across the face of the sun. But as the two orbits cross one another at a small angle, it is only when the planet is in or near one of these crossing-points, or 'nodes,' that this can happen. On such occasions, the body of the planet is seen like a black speck on the bright disc of the sun, which it traverses in a straight line.

These 'transits,' as they are called, are of rare occurrence, as it takes a great many revolutions to bring about the coincidence of the two necessary conditions. The intervals follow a rather complex law. There are usually two transits within eight years of one another, and then a lapse of either 105 or 122 years, when another couple of transits occur, with eight years between them. The transit of December 1874 will be followed by one in December 1882, and there will not be another until June 2004. Previous to 1874, the last transit occurred in June 1769, and had been preceded by one in June 1761.

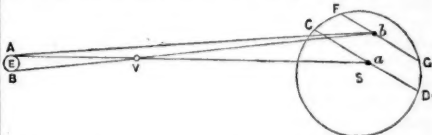
Recurring once more, for illustration, to the rock in the water and the two stations on shore, let us suppose that the opposite shore is visible, consisting of a perpendicular cliff running parallel with the base-line AB, and that we have to ascertain the distance of this cliff, without knowing anything more about the rock than the *proportion* of its distances from the two shores. The cliff, we shall suppose, is too far off to have its distance measured directly with anything like accuracy from so short a base-line; let us see whether any use can be made of the intervening rock. Suppose that the top of a flagstaff on the rock is seen from A projected against the cliff at a spot where there



is a permanent mark, a ; when looked at from B, the top of the staff will be displaced to the left, to a spot b , where also we shall suppose that there is a recognisable mark. Now, if the rock were exactly midway between the base-line and the cliff, it is obvious that the distance between a and b would be exactly equal to the base-line; but, for a reason that will appear afterwards, we will assume it known that the rock is three times as far from the cliff as from the base-line; and then it is equally

obvious that ab will be three times the length of AB, or three hundred yards. By turning a theodolite first to a , and then to b , we can next find the angular length of ab , or the angle aBb , which we shall suppose to be $30'$ ($1'$, or one minute, is the 60th part of 1°). Now, in the triangle BRa , we know the angle RBa ($= aBb$), and the proportion of Ra to Rb , and therefore can find the angle RaB by means of the fundamental proposition in trigonometry, that the sides of a triangle are proportional to the sines of the opposite angles. When the angles are very small, the sines become equal to the arcs which measure the angles; and therefore we may assume in this case that the angles themselves are proportional to the opposite sides; and that, as BR is one-third of Ra , the angle RaB is one-third of RbA ; that is, the angle AaB is $10'$. We have thus got the parallax of the point a , with greater exactness than was attainable by merely measuring the angles at the base, and are in a position to calculate the distance Aa or Ba with corresponding exactness. The advantage of this roundabout procedure is, that a comparatively large angle (aBb) is measured, in order to deduce from it a smaller (AaB); so that any error in the measurement is diminished in the result.

Now, the transit method of measuring the sun's distance is, to a certain extent, identical with the process just described. The position of the three bodies, the sun (S), the earth (E), and Venus



(V), is roughly represented in the accompanying figure. The distance of Venus from the sun may be taken roundly as three times her distance from the earth. The exact ratio is, as before stated, well known, and is not far from this. An observer at a station A, on the northern part of the earth, will see the planet projected on the sun as at a , while a southern observer will see it at b ; and if we assume the stations to be 4000 miles apart, the distance between a and b will, by the foregoing reasoning, be 3 times 4000, or 12,000 miles.

But how get the angular measure of ab ? For each observer sees only one of the spots, and does not know where the other is; and there are no permanent marks on the sun's surface to guide us. The difficulty is got over in the following way: The observer at A notes the exact time when the planet has fairly entered on the sun's disc at C—the instant of internal contact at ingress, and then the instant of internal contact at egress, and thus gets the length of time of the transit—the time it takes the planet to move over the path CD. The interval of time between the two internal contacts is not the whole duration of the transit. The planet has a sensible breadth of disc, and the transit begins and ends at the instants when the centre of the planet is on the edge of the sun; but as this is difficult to determine by observation, attention is directed to the contacts, and allowance is made at both ends for the time it takes the planet to move over its semi-diameter. The time of traversing FG is determined at the other station in the same way. Obviously, the duration of

the transit at A will be longer than at B. The average duration of the transit of 1874 was calculated beforehand at nearly four hours, and the difference of duration at the several stations might be twenty minutes and upwards. The greater this difference, the more favourable are the stations for accurate determination. Now, from the times of transit it is possible to find the length of the paths or chords CD and FG. This is got at from knowing by observation the rate of Venus's apparent motion in the heavens as seen from the earth—that is, her relative motion in regard to the earth, which is also moving in the same direction. That relative motion is such, that it carries her in an hour over about 4' of arc. If, then, a transit lasted five hours, we should know at once that the chord described on the sun was 20' long; and so for any other duration. The lengths of the chords being thus found, we are in a position to find the distance between them. For the angular breadth or apparent diameter of the sun can be measured, and is, on an average, 32', or over half a degree. Now, when the diameter of a circle is known, and the length of a chord, the perpendicular distance of the chord from the centre is calculated by simple arithmetic from a well-known property of the circle. The central distances of the two chords are thus found; and the difference of these distances is the distance between the chords themselves. This gives us, at last, the distance *ab* in angular measure; and we may assume that it is found to be 30". In the triangle AV*b*, then, we know the angle *bAV* to be 30"; and, reasoning as before, we conclude that the angle *A*b*V* or *A*b*B* is one-third of this, or 10"; but *A*b*B* is the angle subtended at the sun by the earth's radius; that is, 10" is the parallax of the sun—the object of the whole inquiry. Without referring to the triangle AV*b*, we might, in the case of such small angles, infer directly that if a line of 12,000 miles on the sun subtends at the earth an angle of 30', a line of 4000 miles at the same distance at the earth will subtend an angle of 10". These round numbers are assumed for simplicity of explanation; what the actual parallax is held to be, we have seen before.

Besides the method of Halley, another method was devised by a French astronomer, named Delisle, which consists in observing the exact times when the transit is seen to begin at two distant stations, and using the difference of time as an indication of the sun's distance. The same use is made of the times of ending of the transit. For this method, the longitudes of the two stations must be exactly known, in order to be sure that the same instant of absolute time is referred to at both. The accurate determination of longitude is always a matter of great difficulty, except where electric communication exists. Delisle's method was to be used at several, at least, of the stations, on occasion of the recent transit. It has the advantage of being available in cases where the whole duration of the transit is not visible.

In addition to the trigonometrical methods, great things were expected from photography, the application of which to the celestial bodies has recently been brought to such perfection by Mr De la Rue and others. Hundreds of pictures of the sun have been taken with the black speck on his disc at all stages of its progress across; and it is believed that by micrometrical measurement of these pictures, and comparison of those taken at

distant stations, the interval between the spots may be got with an accuracy little, if at all, inferior to the Halleyan method. Micrometer measurements applied directly to the image of the sun as seen in the telescope, are also expected to afford valuable indications. The problem has thus, like a beleaguered fortress, been assaulted from a variety of quarters with a variety of arms, and we may hope that an effective breach has been made.

Such is an imperfect outline of the transit method of finding the sun's distance. We have purposely omitted all mention of the thousand and one subsidiary operations necessary in the actual working of it; the precautions that must be taken against the many insidious sources of error that beset the observer; and the endless considerations that must be taken into account before the true value of an observation is arrived at. To illustrate all this in detail, would carry us into too wide a field. We trust that what has been said will enable the reader to understand in some measure what so many scientific men were about on the 9th of December last; and will prevent his being surprised if he shall find them, two or three years hence, beginning to plan a similar campaign for December 1882.

WALTER'S WORD.

CHAPTER XXI.—THE NEW BRIDGE.

It was a habit of Walter's—no doubt induced by the practice of his profession—to note the countenance of his fellow-creatures narrowly, and it struck him that that of Lilian, as she greeted him upon the lawn of Willowbank, wore a look that he had not seen upon it before. Her eyes were always earnest, and her voice soft and natural, never breaking into those little screams of pretended admiration or emotion, which fashionable young ladies use; but upon this occasion, her glance was sunnier and more encouraging than he had ever seen it, while her tone of welcome had a certain demonstrativeness about it, such as, had they been alone, would have filled him with wild hopes, but which, since there were spectators, he concluded meant defiance. 'However you, Sir Reginald, may choose to treat Mr Litton,' it seemed to say, 'it is my intention to shew that I am glad to see him.' Lotty too, instead of the smile with which she was wont to greet him when she and her sister were alone together, looked grave and timid; which he set down to the same cause—namely, the presence of her husband.

'I feel that I ought to apologise,' said Walter, 'for such an early visitation; but it seems to me there has been a little mistake. Mr Brown was so good as to tell me to come early—to spend the afternoon, as I understood him.'

'Then, how very rude you must have thought us, Mr Litton!' exclaimed Lilian. 'Neither Lotty nor I were ever told a word of that. It is so unlike papa to be so forgetful.'

'I am afraid it is I that am the sinner,' observed Sir Reginald penitently. 'Your father did tell me this morning, Lilian, that Litton would probably drop in soon after luncheon; but I knew that Lotty had some serious shopping to do, in which she would require your assistance (bonnets, my dear fellow, which with my wife are paramount), and so I kept at home myself—a very bad substitute,

I allow—to do the honours in your stead. My conscience smote me, I promise you, when I saw him in his white tie and polished boots (like a fellow who has been up all night at a ball)—there is something so exquisitely ridiculous in a man in evening clothes in the daytime—and reflected that he had got himself up so early all for nothing, or at least only for me; but I really did it for the sake of you ladies.'

'I beg you will leave me out of the question, Reginald,' said Lilian coldly: 'if my father himself had so behaved, it would have been an act of inhospitality; but in your case it was a rudeness, not only to Mr Litton, but to me.'

'I really cannot admit that, Lilian.'

'Then we must agree to differ upon that point—at all events, I hope you have done your best, in your self-assumed character of master of the house, to shew Mr Litton the lions.'

'He has heard them,' said Sir Reginald, laughing. His temper, which, as Walter was well aware, was none of the best, seemed imperturbable, and only by a red spot on each cheek, could you perceive that his sister-in-law's reproof had stung him. 'He came at three o'clock, you know, as though he had been asked to dine with them.'

'Reggie is incorrigible, Lilian,' said Lady Selwyn, forcing a little laugh, 'and it's no use being angry with him. After all, my dear, remember Mr Litton and my husband are old friends, and I daresay have got on very well without us.'

'Have you seen our new bridge, Mr Litton?' inquired Lilian, without taking any notice of this attempt at mediation.

'No,' said Walter. 'What bridge?'

'Why, the one papa has thrown over the little brook by the rose-garden. But you have been shewn nothing, of course!'

'There's ingratitude!' exclaimed Sir Reginald. 'Why, I left you to exhibit it to him designedly. I knew he would have to see it.'—

But Lilian was already leading the way to this new wonder, with Walter by her side, leaving Sir Reginald and his wife to follow them, or not, as they, or rather he, might feel inclined.

'It is positively disgraceful,' muttered the baronet, 'to see how your sister is throwing herself at that fellow's head.'

'Let us hope not *that*, dear,' answered Lotty mildly.

'What's the good of hoping when she's doing it, stupid!' returned he angrily. It had begun to strike him that the somewhat high-handed course he had taken to prevent the young people spending the afternoon in each other's company, had not had quite the result he had intended, but, indeed, rather the contrary one—their heads were very close together, and by their eager talk they seemed to be making up for lost time.

'Had we not better go to the bridge too?' said Lotty timidly.

'No—yes; that is, *you* had better go,' was the curt reply. 'As for me, I can't trust myself to see the girl making such a fool of herself; though this is the last day, thank goodness, that she will have the opportunity of doing it. Follow them up at once, and mind you keep your eyes open and your ears too;' and Sir Reginald turned upon his heel, and, lighting a cigar, strolled away towards the entrance gate.

In the meantime, Lilian's tongue was not idle.

'That is only a specimen, Mr Litton,' said she indignantly, and scarce waiting till they were out of earshot of their late companions, 'of Sir Reginald's officiousness, and of how much he takes upon himself of what ought to be my father's province. I am sure papa has no idea that you have been treated thus.'

'I beg, Miss Lilian, that you will not distress yourself on my account. That you should do so, does indeed give me pain, whereas, nothing that your brother-in-law can say, or do, can affect me in any way.'

'He has been doing his best, then, to annoy you?' said Lilian quickly. 'I guessed that by the look of his face.'

'He does not trouble himself to be very agreeable to me, certainly,' answered Walter, smiling. 'And yet, I have done nothing—voluntarily at least—to offend him.'

'I think he is jealous of you, Mr Litton—I mean, as respects your position in this house, and my father's liking for you.'

'But I am nobody here; scarcely even a guest, since I have been employed by Mr Brown professionally, while Sir Reginald is his own son-in-law.'

'Yes; but his egotism is such that he wishes to be all in all here. As it is, I am sorry to say that he exerts a great influence over my father: this notion of our going abroad, for instance, is certainly his own idea.'

'You do not wish to go abroad, then, Miss Lilian?'

'Well—no; not for so long, at all events, or rather, not for an indefinite time, such as is proposed. One does not wish to be separated from all one's friends, without some notion of when one will see them again—does one?'

'No, indeed. But is it really decided that you are to winter in Italy?'

'Yes; we are to go to Sicily first—in October—in a yacht, which Sir Reginald has secured. The sea-voyage has been recommended to me, it seems; though I am sure I don't want a sea-voyage.'

'Perhaps it will do you good; you are not looking in such good health as when I had first the pleasure of seeing you.'

'Is that wonderful to you who know what ails me? It is this spectacle constantly before me of my sister's unhappiness that wears and worries me so; and her husband, you may depend upon it, will be no kinder at sea than on land. Indeed, when I reflect upon his growing ascendancy over my father, and on the isolation from all our friends that awaits us, it seems almost as though I myself were about to be subjected to his tyranny.'

'I have too good an opinion of your sense and spirit to apprehend such a subjugation, Miss Lilian; and, in fact, I think you have declared your independence pretty plainly this very day.'

'Well, I was angry at his behaviour to you, Mr Litton, and so spoke up, but I sometimes fear that I affect a courage in contending with him that I do not possess. If I was to be ill—I mean, really ill—for example, I often shudder to think what puppets Lotty and myself would be in his hands, now that he has once gained my father's ear.'

'He seems to have gained it very quickly,' said Walter musingly.

'Yes; it is very strange, but so it is. I am ashamed to say that I think his possessing a title has given him a sort of stand-point; for my part,

however, he not only seems no better as Sir Reginald, than he was as plain Captain Selwyn, but twenty times worse! O indeed, indeed, it is no laughing matter!—for Walter could not forbear a smile at her womanly vehemence—and when we are far from home, and—and—friends, I shall feel so lonely and so helpless to resist his will!

'If your apprehensions carry you so far as that, Miss Lilian,' said Walter gravely, 'I would positively decline to leave England. There is Torquay or the Isle of Wight.'

She shook her head. 'I have tried all that; but, for the first time in my life, my father has overruled my wishes. I sometimes think that there is a plot between them; for my own benefit, of course, as respects papa; but in Reginald's case, as certainly for his own advantage.'

'I wish to Heaven I could help you, Miss Lilian! There is nothing I would not do.'

'I know it, Mr Litton,' said she earnestly. 'You are a true friend to all of us; so different from that smooth-tongued man yonder, who can also be so rough and tyrannous. But hush! here comes poor Lotty; and I had so much to say to you, which I must not speak of now.'

'Well, Mr Litton, and what do you think of the new bridge?' asked Lady Selwyn, with that artificial sprightliness which a woman must be crushed indeed not to be able to assume upon occasion. 'Papa was his own architect, and is immensely proud of it, so I hope you have been going into raptures.'

Walter had been standing by the new bridge for the last five minutes, and not even noticed its existence, but now he hastened to express his approval.

'It is Venetian,' she went on, 'in its style, as papa avers; but Reginald, who, as you know, is so absurd, will call it the Willow Pattern Plate. So the question has been left by consent for us to decide, when we shall have seen Venice with our own eyes.'

'You are looking forward with great delight, I suppose, to your first visit to Italy?'

'Well, yes, I suppose I am; but what we all look forward to most is, that the change will do Lilian good. We think her looking so pale and out of sorts.'

'Oh, I am well enough,' said Lilian wearily.

'Nay, you can scarcely say that, darling, when papa feels so curious about you; and even Reginald!—'

'Have you told Mr Litton who is coming to dine to-night?' interrupted Lilian suddenly.

'O no, dear; I thought it was to be a secret. Indeed, Reginald particularly told me not to mention it, so that it might be a pleasurable surprise to Mr Litton.'

'Well, Reginald has not told me, nor, if he had, should I be bound to obey him.—Mrs Sheldon is coming to dinner.'

'Mrs Sheldon! Well, that does astonish me,' exclaimed Walter. 'I am glad to hear it, however, for it shews that your father has now forgiven everybody who had a hand in making his daughter Lady Selwyn.'

'O yes, he has quite forgiven her, and, indeed, likes her very much.'

'Then this is not the first time he has seen her?'

'Oh, dear no,' answered Lotty gaily; while Lilian leant over the Venetian bridge, and shredded a plucked flower into the water with impatient fingers. 'She came to call—let me see—the very

day after you were here last; and she staid to dinner; and has been here since very often.'

'I don't like Mrs Sheldon,' observed Lilian quietly.

'Well, my dear, we have seen so little of her, that is, comparatively,' replied Lotty nervously. 'Reginald, who has known her all his life, has a very high opinion of her, you know.'

'Yes, I know that,' said Lilian.

'And papa is certainly pleased with her.'

'I know that too,' repeated Lilian, and this time with even more marked significance.

'O Lilian, for shame!' exclaimed Lotty. 'What must Mr Litton think!'

'Mr Litton is old friend enough, or, at all events, has shewn himself friendly enough to both of us, Lotty, to be told. If we had any friend of our own sex'—and here Lilian's voice was lost in a great sob—'with whom to take counsel, it would be different, but, as you know, we have none. We see no one, now, but Sir Reginald's friends.'

'O Lilian, Lilian!' cried Lotty, looking round about her apprehensively; 'for my sake, for my sake, say no more; I am sure you will be sorry for it. It is not fair, either to me or my husband, or to papa himself.'

'Very well; then I will say nothing.'

'I hope you have not already said too much,' sighed Lotty.

'Nay, indeed, Lady Selwyn,' observed Walter, 'I have gathered nothing of this forbidden fruit. I have no idea at present as to what it is that Miss Lilian wishes you to withhold from me; and I shall make it a point of honour not to guess at it.'

'You are very good, I am sure,' said Lotty nervously, and speaking like one who repeats a lesson learned by rote. 'I think I heard the front-gate click, and it is just the time for papa to be home. Had we not better go and meet him?'

'By all means,' cried Walter, manifesting an extraordinary interest in Mr Brown's return from the City, but, in reality, desirous to relieve the young ladies from the embarrassment of his presence; and he moved away accordingly. Lady Selwyn, however, hastened to accompany him; while her sister remained behind, perhaps to remove the traces of her tears. The former made no attempt at conversation with him, and Walter found it no easy matter to keep his thoughts from speculating upon the cause of the strange scene he had just witnessed. That something had occurred with respect to Mrs Sheldon, which had roused Lilian's extreme indignation against her, was evident; and also that she suspected Sir Reginald of designs of which Walter himself, who had such good reason to distrust him, could hardly believe him capable. It really seemed that the reconciliation of the little household at Willowbank had brought with it, at least, as much of evil as of good.

As they left the shrubbery for the lawn, he saw his host walking rapidly towards them, having apparently just left his son-in-law, who was standing on the carriage-sweep; his brow was knit, and his face wore an angry flush; but as he drew nearer, these symptoms of wrath seemed to evaporate, which Walter shrewdly set down to the circumstance that Lady Selwyn was his companion, instead of Lilian, for whom the old gentleman had probably taken her.

'Good-day, Mr Litton, good-day,' said he; 'I am afraid I must plead guilty to having forgotten

that I had asked you to look in upon us early, until it was too late to alter the ladies' plans; but I hope Sir Reginald made himself agreeable.—Lotty, my dear, if you will go and dress for dinner, and then come down and do the honours to Mr Litton, I will do my best to amuse him in the meantime.—By Jove! what a lucky fellow you are to be dressed, man. It's not often they get me to do it; but we have got another guest to dinner to-day besides yourself, and, unfortunately, it's a lady.

'I am sure the lady would feel herself greatly complimented, if she heard you say so, papa.'

'Tush, tush! I was only speaking generally. It is deuced hard on a man at my time of life to have to change his clothes because a woman is asked to dine. With you young fellows, it is doubtless different; though, when I was your age, Mr Litton, I had never had a pair of polished leather shoes on my feet, nor so much as a tail-coat on my back. The only evening-parties I ever attended were those at the Mechanics' Institute.'

'Indeed,' said Walter, not knowing what else to say, though he was well aware that a more rapturous appreciation of the difference between Mr Brown's Now and Then was expected of him. 'Such a mode of life must have been very unconventional and independent.'

'Gad, I don't know about the independence, sir; I had but a pound a week, except a few shillings that I made by working after-hours, and which I laid by to marry upon. People said it was rash in me to think of a wife; but it is my opinion, that when a young fellow gets to be three-and-twenty, it is high time for him to think of such things—that is,' added Mr Brown, with sudden gravity, 'if he chooses, as I did, one who is accustomed, like himself, to economising and simple fare; for to drag a girl down from competence and opulence to what seems to her like beggary by contrast to it, is a very shameful action.—Hollo! Lillian, my dear, where did you spring from?'

'I have only been as far as the new bridge and back, papa.'

'Well, you'd better go in and dress for dinner, my dear. Your sister has been gone these five minutes.'

'But my toilet does not take quite so long as her ladyship's,' returned Lillian, smiling.

'Well, well; rank has its duties, no doubt, as well as its privileges,' observed Mr Brown complacently. 'Perhaps you will marry a baronet, or maybe a lord, yourself, Lillian, some day, and then, I daresay, you will take as long to dress as Lotty.'

'Why should I only marry a lord, papa?' said Lillian complainingly. 'Can't you look a little higher for me? Why should I not be a duchess, for instance?'

'Go along with you, and dress for dinner,' laughed her father, pinching her cheek; but when she left to do his bidding, his countenance grew grave.

'Lillian is far from well,' said he; 'I don't think the English climate agrees with her.'

'She looked very well when I first had the pleasure of seeing her,' observed Walter. 'I would fain hope that her indisposition is but temporary; the heat has been exceptionally great this summer.'

'No, no; it's not that; but something more serious, though we don't know exactly what. Dr Agnew has prescribed change of climate. You are doubtless aware that we are going abroad next month!'

'I have heard so, sir,' said Walter quietly. 'Of course, I regret it, for my own sake, but still more for the cause that takes you away.'

Common politeness would almost have dictated as much as this, yet Mr Brown was obviously displeased with the remark, and in his reply to it, ignored the sentence that referred to his daughter altogether.

'Well, yes, of course it will separate you from us completely; but a young man like yourself is always making new friends; for my part, I shall be most pleased to forward your interests, if it should ever lie in my power to do so. But I hope, when we come home, we shall hear of you as having made your own way in the world. After all, that is the only satisfactory method of doing it. Look at me: I had no patrons; I did not lay myself out to conciliate society.'

'That is very true,' mused Walter: his thoughts were far away, dwelling upon the time when the house before him, now so full of light and life, should, with its shuttered windows and tenanted rooms, strike desolation to his soul. Whether Mr Brown fancied that his guest's attention was wandering, or, on the other hand, deemed his reply too apposite, he was manifestly annoyed. 'Come,' said he; 'though you are dressed fine enough, you will like to wash your hands before dinner, I daresay; let's step inside.' And they went in accordingly.

CHAPTER XXII.—BANISHED FROM EDEN.

Notwithstanding the reputation which Lady Selwyn had acquired for a prolonged toilet, she was the first person to come down to the drawing-room, where Walter had been 'kicking his heels,' as the phrase goes, while the others had been dressing for dinner. As a matter of fact, he had not been kicking his heels, but taking up book after book—profusely illustrated, and wholly unreadable, as most drawing-room books are—after the dissatisfied and changeable fashion of all too early guests; but in his case there was not only his 'too earliness' to render him uncomfortable. It was impossible for him to avoid the conviction that, except to one person of that household, his presence had become unwelcome, and that it had been resolved upon by all the rest that this evening was the last that he should spend as guest beneath that roof. He was a high-spirited young fellow enough, and, under similar circumstances, would have put on his hat, and marched out of any house in London, there and then, without inflicting his company further upon unwilling companions: he was not so fond of a good dinner that he could eat the bread of humiliation with it; but though very sore at heart, he could not make up his mind thus to leave Willowbank. If there was but one within its walls who was glad to see him, she, at least, he felt sure, was very glad; if to others he was an object of suspicion or dislike, to her he was a trusted friend. She had confided to him her troubles, and would that very day have even taken counsel with him upon some important domestic matter, had she not been overruled by her sister. He had no desire to know what it was—unless his knowledge of it might enable him to give her aid—but it was delightful to him to think that she had thought him worthy of such confidence. Possessing her good opinion, he could afford to despise the distrust of all the rest; and if he felt

indignation against one of them, it was less upon his own account, than because that one had rendered himself distasteful—nay, abhorrent—to Lilian. As for the old merchant, he only pitied him for his weakness in having been so cajoled by his son-in-law, and dazzled with his fire-new title; and as to Lotty, though he felt she had become inimical to him, he well understood that she was no free agent, but a puppet in her husband's hands. It was impossible that he could ever be angry with her, or regard her otherwise than with tenderness and compassion; and if his feelings towards her had changed, if that respectful devotion for her, which he had once entertained, no longer existed, it was not from any conduct of hers, but simply that his allegiance had been transferred elsewhere. It was impossible any longer to conceal from himself that another now reigned in her stead; if he had had any doubt of it, the fact that he no longer felt any bitterness or disappointment about Lotty's having ignored himself and his services during the time of her elopement—that she had not even mentioned his name to Lilian—should have convinced him of this. He cared no more for her indifference or forgetfulness, but only pitied her woes. As she entered the room now, beautiful and elegantly attired, and smiling—though not with the frank smile of old—he experienced none of those sentiments which her presence had once inspired: she seemed to him no longer herself at all; the very words she spoke to him—some conventional apology for his having been left so long alone—were not her words: she was but the mouth-piece and the messenger of another.

'Reggie ought to be ashamed of himself for not having been down before, Mr Litton; he would finish his cigar, though I told him it was time to dress; but I have hurried over my toilet, in order to keep you company, so you must forgive him, for my sake.'

'I would forgive him much more than that, Lady Selwyn, for your sake,' said Walter: the words had escaped him without his reflecting upon their significance, and the next moment he was sorry that he had so spoken, for poor Lotty's face grew crimson from chin to brow. 'As to your toilet having been hurried,' added he quickly, 'I should never have guessed it, had you not told me so. May I compliment you—as an artist—upon the colour of your dress?'

'It is Japanese,' said Lotty, 'and a present from papa. He is never tired of giving me little *cadeaux* of that kind. Reginald says I am like the Prodigal, whose return was solemnised by having beautiful robes given to him; only, in my case, there is no one to object to it: dearest Lilian is not one bit jealous.'

'I can well believe that,' said Walter enthusiastically. 'She has no thought of herself. Before your reconciliation with your father was effected, her heart and head were busy with that only; she scarce seemed to live for herself; and even now it is your well-being—your happiness—which concerns her more than her own.'

Lotty's pale face flushed, and in her eyes the dewy pearls began to gather, as she sighed: 'I know it, ah, how well I know it! and if I could but see her happy—in her own way! O Mr Litton, if I had but the power, as I have the will, to serve you both!' Here she stopped, frightened, as it seemed, by her own words. 'Hush!' whispered she, with

her finger on her lip; 'don't answer me; I only wish you to know that I am your friend. I can do no good, but you must never think that I mean to do you harm.'

'I should not think that, even if you did me harm,' said Walter softly. Her words had gone to his heart; not—just then—because of their significance, though they were significant indeed; but because this tender timorous woman had ventured thus to express her sympathy.

'Do not imagine,' she went on, in hurried tones, 'that Lilian has told me anything; alas! I have read her secret for myself. I can give you nothing but my prayers—not even hope. She is not a girl like me, ungrateful and undutiful, who would leave her father and her home—you must give her up, or she will suffer for it.'

'Lady Selwyn!'

'Oh, I know, I know: it is easy to offer such advice as mine. But, since this can never be, be generous, and spare her all you can. I hear her step upon the stairs—pray, promise me.' As Walter bowed his head, Lilian entered the room.

'I hope her ladyship has been affable, Mr Litton?' said she, smiling.

'My dear Lilian,' exclaimed Lotty, 'how can you be so foolish!'

'Indeed,' answered Walter gaily, 'I should scarcely have guessed, had I not known it, that there was any social gulf between us.'

Then, as they all three laughed, Mr Brown entered: 'Come, come; tell me the joke, young people, or else I shall think you were laughing at me behind my back.'

'Mr Litton has been complimenting me, papa, upon my magnificent apparel,' said Lady Selwyn promptly; 'and we all think it a little grand for the occasion.'

'Not at all,' said the old gentleman seriously; 'I always like to see people dressed according to their rank.'

'But the Queen does not put her crown on every day, papa,' said Lilian.

'Well, this is not an everyday coincidence; we have honoured guests to-night. And, besides,' added he hastily, 'my picture—yours and mine—has come home from the Academy, and such makes the date important.'

'Now, I call that very pretty of papa,' said Lady Selwyn. 'Don't you, Mr Litton?'

'Indeed, I do,' said Walter.

'Yes, yes; I shall always value that picture, young man, and, I may add, the artist who painted it.'

Walter expressed his sense of the compliment, though, truth to say, the valedictory air with which it was expressed had rubbed the gilt off sadly.

'I hope the other picture will please you equally well, sir, when it is finished.'

'I have no doubt of that; I will leave directions with the housekeeper about it, so that you can send it home when it is done.'

This was another blow to Walter; for he had secretly intended to keep the Joan in his studio till his patron had returned from abroad; he had felt that that would be a solace to him, and besides, when they did return, it would have provided an excuse for his paying a visit to Willowbank. His chagrin was such that the entrance of Sir Reginald into the drawing-room was quite a relief to him, since it at once gave a turn to the conversation.

'Your guest is late, Mr Brown,' said the baronet. 'Yes, yes,' said the merchant, who had already pulled out his watch with some appearance of impatience. 'I hope they understand below-stairs that our party is not complete.'

This was a good deal for Mr Brown to say, since it was his invariable principle—or so at least he had told Walter—to wait dinner for nobody. 'Why should the rest of the alphabet have their meat done to rags, because Z is always behind-hand?' was one of his favourite sayings.

'My aunt is generally punctual as clock-work,' observed Sir Reginald.

'So I should have inferred, from what I have seen of her character,' answered the other.—'Ah, there's the front-door bell.'

It was curious to see how fidgety was Mr Brown, and still more so to observe, now that the cause of his anxiety was removed, and his expected guest had come, how he abstained from any demonstration of welcome. He remained, as if by design, in the further corner of the apartment, when Mrs Sheldon was announced, and the rest of the company stepped forward to greet her. At the moment, Walter thought this was for the purpose of observing how he himself should first meet the lady; that it was a sort of trap, laid for him, by which his host might be certified of some suspicion that he and the widow were old acquaintances. In that case, he resolved to shape his conduct by her own, which would doubtless have been decided upon beforehand. If she shrank from recognition, it would be easy for him to ignore her acquaintance; but he would no more initiate deception.

Notwithstanding her recent bereavement, Mrs Sheldon was not in widow's weeds; she refused, it seems, to wear the customary garb of woe for a husband who, in his lifetime, had treated her so ill; or, perhaps, she knew that craze was unbecoming to her. She was dressed in gray silk, trimmed with black lace; and in the soft lamplight of the drawing-room, looked quite bewitching. She embraced Lotty with great effusion, kissed Lilian on the cheek, nodded familiarly at Reginald, whom she had met before that morning, and then held out her hand to Walter, with a 'What! you here, Mr Litton?' Both speech and action were so marked, so evidently designed to attract attention, that it seemed almost impossible they should have escaped Mr Brown's notice; yet they did so. He could not, of course, but have heard and seen, but the circumstance did not appear to strike him as remarkable; doubtless, he concluded that Mrs Sheldon and Walter had met during one of her recent calls at Willowbank, and therefore thought little of her claiming acquaintanceship with him. By the expression of the widow's face, it was clear to Walter that her intention, whatever it was, had missed fire in the performance. The spectators, too, had evidently expected some result: the baronet frowned, and bit his moustache discontentedly; Lotty, who had cast down her eyes, as though to avoid some unpleasant scene, looked up again, with an expression of relief; Lilian, who had turned a shade paler as the new-comer addressed Walter, but had never taken her eyes off her face for a moment, wore a look of disdain. Quite unconscious of all this, Mr Brown himself had at last come forward to greet his guest. He

did so with warmth, yet, at the same time, as it seemed to Walter, with as little demonstrativeness as possible. His words were conventional enough, but his voice was unusually soft and low, and he retained the widow's hand in his much longer than is customary. Perhaps it was for this purpose that he had not greeted her earlier, since, when other people are waiting to shake hands with a lady, you can scarcely keep her fingers prisoners beyond a second or two. How often, or on what occasions, Mrs Sheldon had been a guest at Willowbank, since her mediatorial letter had been received, Walter did not know, but she had evidently made the best use of her time with Mr Brown. It was borne in upon the young artist at once, that what Lilian had said he was old friend enough to be told, and which Lotty had objected to being revealed to him, was, that a certain tenderness had sprung up between the old merchant and this newly-made widow. That Lilian should regard it with aversion, was natural enough; and that Lotty, being under the dominion of Sir Reginald, this lady's favourite nephew, should not so regard it, was also explicable. He felt that those who were already his enemies in that house, had recruited a new ally, more dangerous to him, perhaps, than any one of them, in the person of the handsome widow; for during their previous acquaintance with one another, had he not shewn himself proof against her charms; and had not her farewell words to him been such words of bitterness as only the tongue of a slighted woman knows how to frame! He had then been able to despise her charge that he had fallen in love with his friend's wife; but his heart now sank within him at the thought of how she might abuse another's ear with the same calumny; not Mr Brown's, nor Selwyn's, nor Lotty's, but Lilian's ear. Had he been a wiser and a less honourable man, he would have known that he had it in his power to set himself right—and more than right—with Lilian, by simply revealing the cause of this woman's malice; but such an idea never entered his mind. He felt that there were overwhelming odds against him; and that, probably, though the first blow had missed its mark, he would undergo their onset that very night; but he had no thought of any resistance such as would compromise even the most cruel of his enemies. He had promised Lotty to 'spare' her sister; that is, as he understood it, to make her no offer of marriage, since such a union must needs be utterly hopeless; and he had made a promise within himself to spare Lotty; that is, not to imperil by any revelation—however such might excuse his own conduct in Mr Brown's eyes—the reconciliation that had been effected between herself and her father. His foil, in fact, had the button on, while those of his antagonists were bare.

Mr Brown of course took Mrs Sheldon into dinner, while Lilian fell to Sir Reginald's lot, and Lady Selwyn to Walter's. The conversation, was lively enough, and though not very general, still, more so than on the last occasion when he had sat at that table; for the baronet's sallies were seconded by his aunt, who, as the merchant admiringly remarked, was 'a host in herself as well as a guest,' a stroke of pleasantry that Sir Reginald applauded very loudly, and of which poor Lilian looked utterly ashamed. That the widow was 'making the running' with the owner of Willowbank very

fast indeed, could not be doubtful to any one that heard her; but, nevertheless, the whole company was taken by surprise by Mr Brown's suddenly saying—apropos of the contemplated trip to Italy—'And why should not you come with us, Mrs Sheldon?'

It had seemed to Walter, whom this speech had positively electrified, that Lillian was here about to speak; but Sir Reginald, with his quick, 'Ah, why indeed?' was before her, and she said nothing, only casting a despairing look across the table to her sister.

'Well, well, that is a very tempting proposition, Mr Brown, I own,' answered the widow gravely; 'but it will need a good deal of consideration.'

That she intended to accept the invitation, no one present, except, perhaps, the host himself, who was very solicitous to extract an assent from her, had any doubt; but she declined for that time to give a definite reply. 'It was a delightful idea,' she said—'perhaps almost too pleasurable a one, it would be thought by some, to be entertained by one in her position'—and here she sighed, as though that allusion to her recent bereavement had set some springs of woe flowing—'but it would need very serious reflection before she could say "yes" or "no." She would make up her mind by the next Sunday afternoon, when she had engaged to meet dearest Lotty in the Botanical Gardens at three o'clock.'

'Dearest Lotty,' instructed by a glance from her lord and master, promised to be punctual to that appointment, and expressed her hope that Mrs Sheldon's decision would be in the affirmative. Most of this talk had taken place during dessert, and again and again Lillian, from the head of the table, had looked towards the widow with that significant glance, that even the youngest housekeepers can assume when they think that a change of scene will be desirable. But the other had steadily ignored it, and, in one of her endeavours to catch the widow's eye, Lillian caught her father's instead.

'Why should you be in such a hurry to leave us, my dear?' said he testily; 'we are quite a family party; and neither Sir Reginald nor Mr Litton are three-bottle men.'

Of course, both gentlemen hastened to say that they had had wine enough.

'Very good,' continued the host. 'Then why should the ladies part company from us at all?—What say you, Mrs Sheldon, to our forming ourselves into a hanging committee, and criticising the new picture that has just come home from the Royal Academy?'

'I should like it, of all things,' answered she; 'that is, if such an ordeal would be agreeable to the artist.' It was the first time since their meeting that she had looked Litton in the face, and she smiled as she did so very sweetly.

'It is not a very good time to judge of a picture,' observed Walter; 'not that he cared about that matter in the least, but because he saw that the proposition was, for some reason or other, distasteful to Lillian.'

'But the less light there is, Litton, the more your blushes will be spared,' said Sir Reginald gaily.

'Oh, there's plenty of light,' returned the host; 'I have had reflectors contrived expressly to exhibit it.—Come along, Mrs Sheldon, and pass judgment.'

And with that, he gallantly offered his arm to the widow, and led the way across the hall into the breakfast-room, where the picture had been hung. The gas apparatus which had been made to throw its beams upon the canvas, was soon lit, and certainly Walter's handiwork looked to the best advantage.

'There, madam, what do you think of that?' inquired Mr Brown admiringly. 'The idea is Philippa, wife of what's-his-name, interceding for the lives of the citizens of what-you-may-call it. The Joan which you have seen is to hang opposite, and I must say that a prettier pair of companion pictures it would have been hard to find.'

'And when did dear Lotty sit for this beautiful likeness?' asked Mrs Sheldon, regarding the canvas with all the rapt attention expected in such cases.

'Why, that is the best part of the whole thing, my dear madam: she never sat at all; the likeness is a purely accidental one.'

'Dear me! What! he painted it only from memory? Well, that is most creditable; and also, I may add, very complimentary to Lotty herself.'

And now Walter knew that it was coming, that exposure and undeserved shame awaited him; and also, though he looked neither to left nor right, but kept his gaze fixed upon the canvas, that all who stood by, save Mr Brown himself, were aware of what was to follow.

'Memory?' echoed the host; 'not a bit of it! He had never so much as set eyes upon Lady Selwyn.'

'Ah, you mean not after she was Lady Selwyn. Of course, Mr Litton was well enough acquainted with Lotty's features, since he saw her every day when she was at Penaddon.'

For a moment, not a word was spoken. Mr Brown stared with astonished eyes at Walter, evidently expecting him to speak; but when he did not do so, the colour rose into the old merchant's cheeks, and his eyes gleamed fiercely at him from under his shaggy eyebrows.

'What the deuce is the meaning of this, sir?' inquired he roughly. 'Have you been telling me lies, then, all along?'

'No, sir; I have told you no lies,' answered Walter calmly. 'At the same time, I confess with sorrow that I allowed you to believe what was not the fact.'

'Then this is a portrait, is it, just like any other portrait?' cried the old man contemptuously. 'You excited my interest by a cock-and-bull story, and obtained entrance into this house by false pretences. Nay, I may say you have picked my pocket'—

'O papa, papa!'

It was Lillian's voice, full of shame and agony, but the sound of it, usually so welcome to his ear, only seemed to make the old merchant more furious.

'Be silent, girl!' exclaimed he harshly; and then, with some inconsistency, he added quickly: 'What have you to say about it, I should like to know?'

'I was about to observe, that, so far from picking your pocket, papa, Mr Litton would not take a third of the price you offered him.'

'That is true enough; but I have some reason to believe that this gentleman had an object to gain in being so liberal in his terms. Yes, sir, in acting with such marvellous magnanimity, you threw out your sprat to catch a whale; though, as to your pretending to be a stranger to her ladyship,

I cannot understand, indeed, why Sir Reginald yonder, and Lotty herself, did not inform me'—

'Well, finding him here, Mr Brown,' interrupted the widow, laying her dainty fingers upon his arm appealingly, 'earning such large sums under your patronage, they doubtless hesitated to take the bread out of his mouth, as it were, by denouncing him as an impostor. It was a weakness in Reginald, no doubt, but I think, considering their old acquaintanceship, a pardonable one.'

'Since such is your opinion, Mrs Sheldon, I will forgive him,' replied the old man. 'But as for this gentleman—as I daresay he still considers himself to be, though, when a man sails under false colours in humble trade, we have quite another name for him—this is the last time he shall set foot in this house. Have you nothing to say, sir, absolutely *nothing*, to excuse your having played me such a scurvy trick?'

There was a long silence. For the first time, Walter turned about, and threw a glance upon the witnesses of his degradation. Sir Reginald, as if ashamed to meet his gaze, at once cast his eyes upon the ground; Lotty, with her face buried in her handkerchief, was sobbing bitterly; but Lillian, white as marble, gave him back a look of supplication tender and earnest as that which looked out of the picture itself; only added thereto was an expression of heartfelt gratitude, as though the favour asked had been already granted.

'No, Mr Brown,' answered he, in a firm voice, 'I have nothing to say.'

'Then the sooner you leave this house, the better I shall be pleased,' was the grim reply.

In the glare of the gaslight, he saw two faces, the recollection of which was doomed to haunt him long with a bitter sense of humiliation—one, his host's, full of honest scorn; the other, scornful too, but with the triumphant malice of a slighted woman. He passed out and before them both without a word, and into the hall, from whence he took down his hat and coat with his own hands, and left the house.

AMERICAN NICKNAMES.

OUR American cousins are great in nicknames; and persons, states, and cities seem to have no *locus standi*, until they achieve or obtain a distinctive appellation. The more expressive the name bestowed is, the greater becomes the feather in the cap of the recipients, and certainly many of them are strong enough, peculiar, and pungent. Having had occasion lately to peruse several American works of a certain class, we have thrown together the following brief but strange specimens of topographical and personal nomenclature, the perusal of which, we hope, will not fail to interest and amuse.

Arkansas is called the Bear State, and its natives or inhabitants are Tooth-picks or Sophers. California is, on account of its mineral wealth, the Golden State, and its occupiers nothing more or less than Gold-hunters. Connecticut, as every reader of *Sam Slick* must well know, is the Nutmeg State. It is also Freestone State, and the Land of Steady Habits. The natives are designated Wooden Nutmegs, but whether they like the name or not, we cannot say. Delaware is the Blue-hen or Diamond State; but for some reason, inexplicable to us, the natives are Musk-rats. Florida is

the Peninsular State, and the people who live in it are Fly-up-the-Creeks; both terms sufficiently explain themselves. Illinois rejoices in three names which are severally poetical, ridiculous, and practical: Garden of the West, Sucker State, and Prairie State. Suckers, whatever they may be, dwell therein. Indiana is the Hoosier State, inhabited by Hoosiers, whatever they may be. Iowa, being Hawk-eye State, affords a local habitation for Hawk-eyes. Kansas is another Garden of the West, but, unlike its namesake, Illinois, is occupied by Jayhawkers, which may be, however, only another name for Suckers. Kentucky, in words suggestive of strife in bygone days, is the Dark and Bloody Ground; but the irrepressible fondness for fun having afterwards cropped up, it has latterly become known as Corn-cracker State, and Corn-crackers people it. Louisiana, as a cotton-growing state, is called the Creole State, is inhabited by Creoles, who are facetiously called Cree-owls. Maine is Lumber or Pine-tree State. The Law associated with its name does not seem to have yet resolved itself into a title, but no doubt it will, in course of time. Foxes live in this state. Massachusetts is the Bay State, and Bay Staters reside in it. Michigan is Lake State or Wolverine State; Wolverines, not Lakers, have there a habitation. Mississippi is the Bayou State, and its residents are recognised as Tadpoles. New Hampshire is the Granite State; the natives thereof are Granite Boys. New York is proudly called the Empire State; Longfellowishly, the Excelsior State; and having a grateful remembrance of its obligations to the Dutch, also the New Netherlands. In honour of its historian, however, the natives prefer to be known as Knickerbockers. North Carolina is the Old North State, or Turpentine State, to those who prefer it; and, for the same reason, its natives are either Tuckoes or Tar-boilers. Ohio is Buckeye State, and is specially retained for Buckeyes only. Pennsylvania is honourably designated the Keystone State. After its founder, those who live in it are Pennanites, or, after modern manners, Leatherheads. Rhode Island is lovingly called Little Rhody; although the compliment is somewhat marred, when the term Gun-flints is applied to the sons of the said island. South Carolina is Palmetto State, and the natives are Weasels. Tennessee is Big Bend State, and is the home of Whelps or Cotton-manies. Texas is poetically termed Lone-star State. It is tenanted by Beet-heads! Vermont, as its name implies, is the Green Mountain State, and Green Mountain Boys are to be found there. Virginia is, as a matter of course, the Old Dominion, the Mother of States, and also the Mother of Presidents. Notwithstanding all these proud designations, no one but Beadies or Beagles live in it. Wisconsin is Badger State, and is the home of Badgers.

In addition to the foregoing, the inhabitants of several states and territories have already had names bestowed upon them, although their 'respective places of abode' have not yet been unofficially recorded: to wit, the inhabitants of Alabama are Lizards; Colorado, Rovers; Georgia, Buzzards; Maryland, Craw-thumpers; Minnesota, Gophers; Missouri, Pukes; Nebraska, Bug-eaters; Nevada, Sage-hens; New Jersey, Blues or Clam-catchers; Oregon, Hard-cases or Web-feet. Many of the cities of the United States have also names of their own. A few of the more important are here given.

Atlanta, Ga., is the Gate City; Baltimore, Md., the Monumental City. Boston, the capital of Massachusetts, is, as the comprehensive expression has it, not only a 'whole team and a horse to spare,' but a 'big dog under the wagon' as well. It is the Athens of America, the City of Notions, the Hub of the Universe, the Modern Athens, the Puritan City; and it is also Tremont or Trimountain. Brooklyn, N. Y., is the City of Churches; Buffalo, N. Y., the Queen City of the Lakes; Chicago, Ill., the Garden City. It is possible, however, that a certain recent disastrous event may alter this name by-and-by. Cincinnati, Ohio, is a 'big' place, and rejoices in a number of names: it is Porkopolis, Losantville, Queen City, or Queen of the West. Cleveland, Ohio, is the Forest City; Detroit, Mich., the City of the Straits; Hannibal, Bluff City; Indianapolis, Ind., Railroad City; Louisville, Ky., Fall City; Lowell, Mass., the City of Spindles; Nashville, Tenn., the City of Rocks; Newhaven, the City of Elms; New Orleans, La., the Crescent City; New York, N. Y., Gotham, Empire City, or New Amsterdam; while Philadelphia, Pa., is quietly and unostentatiously called the Quaker City, or the City of Brotherly Love. Pittsburg, in the same state, is called what it deserves to be, Smoky City, or Iron City. Portland, Me., is the Forest City; Rochester, N. Y., Flour City; St Louis, Miss., Mound City; Springfield, Ill., Flower City. Washington, the capital of the United States, is the City of Magnificent Distances. We have no doubt it is so, whether viewed naturally, strategically, or politically.

But, in addition to peoples, states, and cities in America, other important events, places, and things are honoured by having nicknames conferred upon them. The entire continent itself is Old Stars and Stripes, Uncle Sam, the New World, or Columbia. The Amazon is the King of Rivers, although we think, with all due respect, that Queen would have been a more appropriate designation. Confederate soldiers were Johnny Rebs; and the revolting states in the civil war were classed together as Secessia. Faneuil Hall, Boston, is the Cradle of Liberty. The Southern States, taken collectively, are Dixie; negroes, generally, are Cuffees, Quashees, or Sambos; and the grand insignia of all that is good and noble in the gospel of the world, according to Uncle Sam—that is, the Stars and Stripes itself—is affectionately and familiarly nicknamed Old Glory!

A native American cannot receive a higher compliment than to be styled Brother Jonathan; and as the origin of this name is not generally known, we quote the following from Bartlett's *Dictionary of Americanisms*: 'In the course of the struggle for independence, General Washington fell short of ammunition. He took counsel with his staff, but failed to obtain any practical suggestion for relief. "We must consult Brother Jonathan," said he—meaning Jonathan Trumbull, the senior governor of Connecticut. This was done, and the difficulty was remedied. To "consult Brother Jonathan" immediately became a set phrase, and the term has since grown, until it has become, in the eyes of Americans, an equivalent to the John Bull of old England.'

Nor, in its intense desire to give nicknames to whom nicknames are due, does America forget its great men. We have only space, however, to

mention a very few instances: John Quincy Adams was the Old Man Eloquent; Thomas H. Benton, Old Bullion; James Buchanan, Old Public Functionary; Henry Clay, Mill-boy of the Slashes; John C. Fremont, the Path-finder; Andrew Jackson, Old Hickory; Thomas Jefferson, the Sage of Monticello; Abraham Lincoln, the Rail-splitter; John Neal, Jehu O'Caract; Martin Van Buren, the Little Magician; Daniel Webster, the Expounder of the Constitution; and last, but not least, George Washington was the American Fabius, and the Father of his Country.

Parties, political, sectarian, and otherwise, are considered fair game for ridicule in most countries; and in the States, they are certainly not overlooked. During the rebellion, the Peace party, being suspected of favouring the South, were nicknamed Copperheads or Cops, equivalent to 'secret foes,' the copperhead being a species of poisonous snake that gives no warning of its approach or whereabouts. The application is obvious. The Know-nothings were members of a secret society formed in 1853. When questioned as to their proceedings, they invariably answered: 'I know nothing about it.' It was a prudent answer to give, for, as their chief object was to accomplish the repeal of the Naturalisation Laws, the truth might have proved troublesome. The Know-nothings, however, ran their ship on Slavery Rock, and it foundered. Carpet-baggers, as a party nickname, came into existence in 1868, and it has a history which is not without interest. When the first convention met in Alabama to frame a reconstructed constitution under the Congressional Acts of 1867, it had no name. It would not do to call them Republicans, because several members were staunch adherents to Congress. They could not be designated Unionists, Federals, or Yankees, for a similar reason. The question of a proper name for the enemy was, therefore, discussed at a 'caucus'—which word, by the way, is a nickname for a secret or private meeting. Colonel Reese, a strong Unionist, during the conversation, happened to speak of the large influx into Washington of shabby office-seekers, with *carpet-bags*, at the appointment of President Lincoln. This term struck the fancy of the caucus, and it was resolved to adopt it. Next morning, the *Montgomery Daily Mail* applied to the strangers who had seized the governments of the South the name of Carpet-baggers. In a few weeks, other states also adopted it, and it has clung to the agents of the Republican party in Congress ever since. Bogus Boys are the pests of Wall Street and other commercial districts. They derive their name from Borghese, an accomplished rogue, who did a great business in fabricating counterfeit bills, sham mortgages, &c. Bogus Boys are therefore swindlers and 'frauds.'

Tub-thumpers, Hard-shells, and Tunkers are religious bodies. The first are itinerant preachers, who say what they have to say from inverted tubs, or similar elevations, and enforce by declamation what they cannot convey by sense. Hard-shells, we understand, are a section of extreme Baptists, and the nickname, no doubt, indicates the unswerving fidelity of their conduct. Tunkers, according to Mr Hepworth Dixon, are 'a politico-religious sect of Ohio. They believe all will be saved, are Quakers in plainness of dress and speech, and neither fight nor go to law.'

Truly, Tunkers are Tunkers to some purpose, if they act up to their principles! There are hundreds of other party nicknames current in the States, but these few examples must suffice in the meantime.

A LITTLE PARADISE.

It may be news to many readers to be told that the Kawau, the little Paradise, or Wonderland of the Antipodes,* is a small island which lies about twenty-eight miles to the north-east of Auckland, in the Hauraki Gulf. To the memory of Mr J. E. Tinne, of University College, Oxford, who visited it about two years ago, and on whose authority it has been dubbed 'the little Paradise,' it brought back vividly 'the tales one has read in boyhood of fairy spots in the Pacific seas, where cast-away mariners, like Robinson Crusoe, used to live in solitary glory.' All readers of *Peveril of the Peak* must remember how, a long while ago, the Isle of Man was the absolute possession of the earls of Derby; and all readers of newspapers must be aware how, more recently, the Scilly Islands were held on lease by Mr Augustus Smith: well, in some sort of fashion intermediate between those two methods of holding, the little Paradise, when Mr Tinne visited it, was held by Sir George Grey, the former governor of New Zealand. The 'island, which measures about thirty miles round, contains three magnificent harbours, one of which could easily float the *Great Eastern* close to the shore at low water.' Should it ever be your good fortune to enter the middle harbour in the steamer which calls with the weekly mail from Auckland (for they cannot do without letters and newspapers even in the little Paradise), you would probably see the same sight that Mr Tinne saw, and be impressed by it as he was. If it were not for the small size of the island, you might fancy you had come upon 'the Atlantis of the ancients, where the earth gives forth her choicest fruits unasked, where animal life has found its utmost limits of variety and health, and where, with Plato, you might at length find perfect happiness in the contemplation of beauty, and sympathise with nature in her divinest guise. But you would see something that Plato never, even in his mind's eye, saw. As you steamed into the harbour, you would mark how 'a large English-looking house suddenly breaks upon the sight from a lovely sequestered bay to the right, where it stands embosomed in trees, within a few yards of the shelving beach of white sand and gravel.' The little Paradise is a paradise even for the geologist. There are not only mineral riches in the Kawau, but it is said to be a relic of a far older country than New Zealand. The Kawau 'has sunk into the sea, for the valleys that still intersect it were clearly, in a previous age, the beds of large rivers, whose watershed must have been from a far wider area than this; whilst the present mainland of New Zealand is still slowly rising from the deep, and thus differs widely from the Kawau in its origin and present state of volcanic disturbance. In fact, so comparatively new a creation are the two islands of New Zealand proper, that it has been frequently remarked that they were inhabited centuries too

soon.' It is said that 'the only land which can compare with the Kawau for antiquity is Karewa Rock, from which Captain Mair lately sent to the British Museum two lizards (*Hatteria punctata*, Tuatara in Maori), the venerable representatives of an extinct fossil genus found only in that locality.' Once upon a time there were as many as two thousand Maories, so that the soil must be or have been pretty fertile, whilst the adjacent fisheries must also have contributed largely to their sustenance; but, in 1872, there was not a living native on the island. It is believed that some squatters in New South Wales, with stock-breeding proclivities, were the first to purchase the island, whither 'they actually despatched a cargo of beasts, which were landed, but next morning disappeared in the dense bush, and now form the herd of wild cattle which infests the forests, and number about five hundred head.' Apropos of these cattle, it appears that they sometimes create a consternation hardly reconcilable with the tranquil delights of a Paradise; especially if, when the traveller wanders through the paths of this antipodean Eden, his faithful dog shall keep him company; for, even in Paradise, it seems that dogs will go sniffing about in the bush by the side of the road, and that cattle, when a dog 'sets them,' are apt to come at the man, and not the dog. Consequently, there may, perhaps, be seen the rather unparadisical spectacle of blest inhabitants clambering hastily into trees for fear of their lives. When the stock-breeders, already mentioned, had, for reasons to be divined, abandoned their purchase, the island 'became the property of a succession of copper-mining companies, who worked to more or less profit the very rich mine on the west side, until, in 1849, a discovery of gold in California, and the "rush" to that country, deprived them of the necessary labour.' Whether, since that time, anything has been done in the way of working the mines, appears to be uncertain; but, in 1872, the old shaft and a fine smelting-house were still remaining as evidence of the past enterprise.

Ultimately, it passed into the hands of Sir George Grey, who, by the assistance of his own taste, and the natural capabilities of the place, proceeded to convert it into what Mr Tinne calls Utopia. Materials for building the house were found, almost entirely, upon the spot. There was plenty of timber in the forests, of kauri (a coniferous tree akin to the dammar pine); and of that the ceiling and the walls were made. The floors were covered with matting plaited from the native flax (*Phormium tenax*), of which vast quantities are found in the swamps of the island. The library was filled with 'about the finest collection of works on the dialects of South Africa to be found in the world. They were collected chiefly while Sir George Grey was governor of the Cape.' Besides, there were 'Maori antiquities and curiosities, many of them presents from personal friends among his former subjects, and others of them trophies of the last war:' to examine them all would be the agreeable pastime of weeks. Amongst them would be seen 'the original idol which was brought in the canoes from Hawaii, when the natives colonised New Zealand, made from a hard red stone, for which one may search their present country in vain;' and the wooden flute of the poet Toutanikai. Then the attention would be caught by 'several

* *The Wonderland of the Antipodes.* By J. E. Tinne, M.A. Sampson Low & Co.

mere-meres or greenstone clubs, of immense antiquity, the symbols of authority and long descent, every one of which, with its minutest flaws, is as well known to the Maories as our celebrated diamonds to an expert in jewels. The greenstone itself resembles the Chinese jade, and is only found near Hokitika, on the west coast of the Middle Island, at the bottom of rivers. It is extremely hard to cut, being of a greasy tough substance, but may be bought in the rough for a mere song. It is seldom that a piece of it turns out well in the cutting. There are two main varieties, the dark opaque and the light transparent, of which the latter appears to be the least common, though perhaps not the most valued. Each great mere has a history of its own, telling who were its possessors, in what battles they had been engaged, how many skulls it had cleft in twain, besides personal anecdotes of the combatants and their families.

But let us stop outside the house; and let us suppose that the Kawau wears its brightest autumn garb. In the garden are bushes of scented daphne, wildly luxuriant, and wonderfully profuse of blossom; there are 'trees of geranium and heliotrope; English violets breathing forth their modest fragrance in retired nooks, and blushing beds of the ever-welcome rose.' The eye feels refreshed, and a sweet odour seems to fill the nostrils, at the bare idea. Moreover, 'gigantic aloes guard the corners of the walks, whilst on the hillside is a dense jungle, or undergrowth of wild ginger, interspersed with a Japanese plant, from the pulp of which the exquisite rice-paper of commerce is made.' Side by side grow india-rubber trees, tea and coffee plants, and small date-palms; and, if the garden be not a small epitome of the vegetable universe, it is because Sir G. Grey would not introduce any plant which requires artificial heat, or cannot thrive naturally in the New Zealand climate. Does our soul long for fruit? Then let us rise early in the morning, before the sun has dried up the dew, and pick it for ourselves. On our right hand are bushes thick with the small purple guava, having a deliciously acid flavour, with pomegranates and with oranges ripening more readily than they; on our left are 'citrons, lemons, large fig-trees, prickly pears from Malta, strawberries, and grapes, an enticing medley suited to the most capricious tastes.'

As regards pines and firs, the little Paradise is more Californian than California itself; 'nearly every kind you can mention is there, though, naturally, they will not rival the American "big trees" in size for centuries to come.' It appears that every bay or headland in the Kawau appears to be devoted to a different kind of animal. There are tree-wallaby (the wallaby being a small variety of the kangaroo) from New Guinea, let Australians laugh as they will at the notion of wallaby perched in trees; there are rock-wallaby that live on the face of precipitous cliffs, and burrow like rabbits; the meadows and all the open ground are alive with pheasants, and with coveys of the pretty little California quail, with their black crests, who always keep a sentry perched on the stump of a neighbouring tree, to give them timely warning of the approach of strangers; there are wild pea-fowl, with their brilliant plumage; there are Cape geese, strangely exclusive birds, that seem to prefer a Darby and Joan existence, and are

believed by Mr Tinne never to 'leave the piece of water which they have first appropriated to themselves at the commencement of their wedded life;' there are 'the tracks of elk, Virginia spotted deer, fallow-deer, and other creatures. One rare species of bird is the Australian bush turkey, which must equal the capercaillie in size. From where you look out towards the Coromandel Ranges and the Thames, there is a small headland where the wingless kiwi is carefully preserved. They are very scarce, and the feathers are much prized for making caps and cloaks among the Maories.' Moreover, there are opportunities for the exciting sport of stinging, or spearing sting-rays, the sting-ray being described as a loathsome brute, a flat, circular, slimy mass, with malicious, deep-set, red eyes, and with a long spike behind—a fish, however, not without its use, for, to say nothing of its barbed sting of ivory, its body is much esteemed as garden manure. As for a very different fish, commonly called the oyster, whither-soever you wander in the little Paradise, it is said that 'the only provision you need make for a meal is a small hammer, to knock the oysters off the rocks wherever you like to sit down on the shore. These rock-oysters are very small, but deliciously flavoured; they are not the same symmetrical shape as those at home, and therefore you find it easier to open them by a sharp blow on the butt with a stone or hammer, instead of using a knife to prise them.'

As for the scenery of the little Paradise, you may not only gladden your eyes, in a humble way, with the sight of English daisies and buttercups springing up on the soft turf, but it is asserted that 'the island combines the park-like undulations of Blenheim, the bold cliffs and tides of the Menai Strait, and the wooded mountain-sides of Killarney or the Trossachs.' And there is an almost perfect climate. When Mr Tinne was there, there were about forty souls or eight families in Paradise. Sir G. Grey, it is believed, intended to increase the number of inhabitants to about two hundred. At that time there was what licensed victuallars and their customers would, no doubt, consider a great drawback even to Paradise; for Sir George enforced strictly temperance regulations, and no one was allowed to import spirits or beer into the island except for medical purposes. It is to be feared that, by this time, if the population has been increased according to intention, the little Paradise has, notwithstanding its almost perfect climate, been the scene of much sickness and medical attendance.

TREATMENT OF ANIMALS.

THAT men and women, and especially wives, are kicked to death, particularly in Liverpool, is unfortunately but too well known. It is far less common to find that sort of destruction dealt out to the lower animals. Not very long ago, however, at the Marylebone police court, a wretch was sentenced to three months' imprisonment, with hard labour, for having kicked a horse to death. It appeared that the ruffian, a stableman, had 'beaten, flogged, and kicked a horse in the stable, because it drew back from timidity' (not unnaturally, if it had any previous acquaintance with the ruffian), 'when he attempted to put a collar on its neck.' The stableman, having thus had his

temper ruffled, and feeling that he required a gentle sedative, 'went to another horse, which appears to have been entirely guiltless of any offence, and, to relieve the irritation of his temper, kicked it severely, then tied it up by its neck, and again kicked it as hard as he could. The wretched animal then fell down, when, in spite of the remonstrances of one of his fellow-stablemen, he got a whip and flogged it with the butt-end until it rose from the ground.' He himself admitted that he had kicked the horse about thirty times, and that he had given it about thirty or forty blows with the butt-end of the whip. The result was that 'the victim of his cruelty died a few days later from the effects of the injuries it had received.' This dreadful story brought to mind the fact, that the celebrated Friends in Council had discussed the question of animals and their masters. One of the friends playfully recommends the practice of downright courtesy towards animals, declaring that 'they are very appreciative of politeness, and observant of the reverse. They have a great objection to be laughed at.' As for the vast area occupied by the subject of the cruelties practised upon animals, a friend points out that some idea of its vastness may be obtained from an enumeration of the chief amongst the heads under which the subject might be divided: 'The cruelties inflicted upon beasts of draught and burden; the cruelties inflicted in the transit of animals used for food; the cruelties inflicted upon pets; the cruelties perpetrated for what is called science; and, generally, the careless and ignorant treatment manifested in the sustenance of animals from whom you have taken all means and opportunities of providing for themselves.'

Amongst the cruelties inflicted upon beasts of draught and burden is mentioned an atrocity commonly called a 'bearing-rein.' This atrocity is, undoubtedly, still very common; but it has for very many years been, from time to time, severely censured, and personal observation would lead to the conclusion that, though it has not been abandoned, it has been very much modified. A friend bears out the correctness of this personal observation by remarking that, 'as a general rule, the educated man who drives his own horses, and learns to know something about them, slackens this bearing-rein, or leaves it off altogether.' On the other hand, it is urged that 'the coachman, who has some familiarity with the animal, is uncultured, and has not the slightest notion of the real effect of this rein. The cultivated master or mistress, who knows, or might by a few words be taught, the mischief of this rein, and the discomfort which it causes the animal, is often so unfamiliar with the animal that he or she is quite unobservant of the way in which it is treated, and does not understand its mode of expressing its discomfort.' And an illustrative anecdote is told about one of the friends themselves. That particular friend, who is described as being 'fonder of the lower animals than of men,' but totally innocent of any knowledge of horse-flesh, and who is good-humouredly taunted with not having driven a pair of horses since he left college, was one fine day created Attorney-general. His coachman, who was as absurd as most other coachmen about this detestable bearing-rein, tightened it in honour of the master's rising fortunes; and the master, for all his love of animals, never

noticed how the horses he loved were made to suffer, in order to do more credit to his increase of dignity. In this case, the cruelty, though it may not have been of a very heinous description, may be traced to twofold ignorance—that of the coachman, who, through want of culture, did not know what is due even to the lower animals; and that of the master, who, through want of familiarity with horses and their gear, could not give the instructions which his culture would have prompted. This twofold ignorance, again, is the cause of constructive cruelty in another way; for 'pretty nearly half the diseases of the domestic animals are the result of a direct violation of the laws of nature upon the part of the owners of the animals,' the owners, from want of knowledge, being obliged to leave everything to persons devoid of culture.

As regards cruelty practised in the transit of animals, one of the friends, having been a member of the Transit of Animals Committee, was peculiarly well qualified to speak; and though, in consequence of the representations of that committee, certain improvements were introduced, we may, undoubtedly, still adopt his language, and say that 'much remains to be done.' Some people argue, that human care, to as great an extent as is possible, will be insisted upon and exercised by the owner of cattle, from motives of personal interest. The fallacy of this argument, which it was once the fashion to urge in favour of slave-owners and slave-dealers, is, unfortunately, proved by stern facts; and one very good reason why the cattle-owners are not more careful on the point of humanity is, that they have been accustomed, from the very first, to calculate upon, and make allowance for, a certain amount of loss. Besides, one cattle-owner is in the habit of contenting himself with the reflection that, on the whole, he does not lose more than another; and, until it becomes quite clear to him that a little more humanity would give him a commercial advantage over his competitors, he will not see why he should be the first to begin a course which is commercially doubtful, but which is quite certain at the outset to cause him additional trouble and additional expense. Moreover, however great the culture, and however good the intentions of a cattle-owner, he must be dependent upon all sorts of hirelings, over the majority of whom he can exercise no sort of supervision, and have no sort of control. The friend, when asked for practical remedies against this kind of cruelty, could only suggest that the inquirer should follow the example of Lady Burdett Coutts, who has given prizes for the encouragement of humanity to animals; should read up the subject (a great deal of evidence has been given upon it before Committees of the House of Commons); and should, meanwhile, shew an interest in the doings of that excellent Society for the Prevention of Cruelty to Animals, and of other societies that have like objects in view. It must be evident, after a little thought, 'that improvement in the treatment of animals depends upon many small things which it would be almost impossible to enumerate, and the value of which would only be appreciated by those who are conversant with the particular branch of the subject to which these small remedies refer.' For instance, you would hardly believe, says the friend to his fellows, 'unless you had heard the evidence of experts, how much can be done to improve the

transit of animals by sea, by such regulations as the following, the adoption of which is recommended by the Transit of Animals Committee: "The floors of each pen should be provided with battens or other footholds; and ashes, sand, sawdust, or other suitable substance, should be so strewn on the floors of the pens, and on the decks and gangways, as to prevent the animals from slipping." A whole host of evils could be avoided by these simple regulations. It has been said that an Italian, if remonstrated with for ill-treatment of his beast, would answer, without any of those angry oaths whereby an Englishman, under similar circumstances, betrays his inner consciousness of his ruffianism, and with a pleasant smile of surprise and amusement: 'Non è Cristiano!' We are not quite so bad as that; there is nothing so hopeless as cruelty on principle, and, moreover, with a sort of religious sanction.

As regards the cruelty of keeping pets, one of the friends says that it goes against the grain with him to use so harsh a term of so amiable a weakness, 'and for this especial reason, that the young people who keep pets are generally, in after-life, those who are the best friends to animals.' Still, he does think that there is a great deal of cruelty in keeping pets—not so much directly as indirectly. There can be no doubt whatever of the barbarities frequently employed in those devices by which pets are caught and tamed, and rendered amusing; and there can be no doubt that we make pets of creatures which were never meant to be made pets of, so far as what they were or were not meant for can be gathered from certain visible signs. Of course, this remark applies chiefly to the feathered creation. But, on the other hand, there are some birds, such as parrots and cockatoos, which, if longevity and apparently uproarious spirits go for anything, cannot be said to pine away in the confinement of a cage, varied by occasional constitutional upon a balustrade, or an area-railing, or a window-sill, or even upon the shoulders and necks of their tormentors, and which can be taught, without the slightest cruelty, not only to divert their owners and their owners' friends with a choice selection of diabolical noises, but also to 'speak like a book.' Indeed, the allegation of cruelty in the mere keeping of pets is somewhat difficult to maintain; and the term certainly would be most wrongly and idiotically applied in the case of those creatures, such as cats and dogs, which really appear to like the society of human beings. One would be inclined to say that, so far as pets, when they have once become pets, are concerned, the cruelty practised towards them consists chiefly in over-coddling, over-feeding, and whatever else arises from thoughtless indulgence, and wilful or ignorant disregard of an animal's natural constitution. Many a bad quarter of an hour, too, must be passed by the dog, evidently worthy of a better fate, whose eyes, as he waddles, in his overcoat of many colours, a few yards behind his mistress, are turned wistfully but helplessly towards the spot where half-a-dozen of his poorer relations are having a low but exhilarating romp in the public streets. He sends after them one feeble bark of mingled protest at their rude behaviour, and regret that he can't join in it; and, with drooping tail, trudges along in the path of respectability, much as a Buttons, nearly broken-in to service, may be seen carrying a

parcel dolefully behind the young ladies, and, all the while, casting furtive glances of despair and envy at the ragamuffins playing leap-frog in the road. But then Buttons should reflect that man is born to misery, but dogs, for all that appears, are not.

As regards cruelties inflicted upon animals in the cause of science, one of the friends speaks of the barbarities that go on under the pretentious name of scientific investigation; and another says of vivisection, that the very word makes his flesh creep. The difficulty of the question is increased, if it be true, as the friends generally seem to think, that nothing but culture and enlightenment will satisfactorily secure the proper treatment of animals; for one is disposed to ask at the outset where, if not amongst men of science, one would look for culture and enlightenment, and yet those are the very men who are accused of cruelty. However, one is very much inclined to agree with the friend who maintains that it is a crime to make experiments upon animals for the sake of illustrating some scientific fact that has already been well ascertained, adding, that 'you might as well say that it is desirable to put wretched dogs into the *Grotta del Cane* [a cave near Naples] for the purpose of proving that the air in that grotto is mephitic.'

As regards the cruelties of sport, there is another question about which mankind may go on disputing until doomsday. It is probable, however, that not many amongst the superior order of even sportsmen themselves would have much to say in favour of pigeon-matches, and other such things, which a friend describes as poor, contemptible, and brutalising transactions. The friend expresses his wonder that women can 'assist' at such entertainments; but, if one thing be more certain than another, it is that, whether the entertainment be a fight of gladiators in a Roman amphitheatre, or a Spanish bull-fight, or an English pigeon-match, there, so long as fashion and public opinion do not forbid, women will congregate, not so much, perhaps, to see, as to be seen. The same friend, alluding to another sort of cruelty, says: 'I think women could do a great deal in this matter, as indeed they can in most social matters; but it does not seem to have struck him that, even if women were not rather inclined to follow than to lead, as they have been from time immemorial until now, when there is a spasmodic attempt being made to render them more independent and original in action, there would be obstacles in the way of making the treatment of animals a social matter in the sense in which it would be universally subject to the influence of women. The cases in which women can, and do make their power felt and respected are, for the most part, cases in which their personal presence exercises sway, or in which the instincts of sex may be counted upon to produce all but unanimity; whereas it is obvious that cases involving the treatment of animals would but seldom be of that sort. 'It is very little,' as the friend says, 'that direct legislation can do in this matter. We can only rely upon the force of enlightened public opinion.'

* *Animals and their Masters.* By the author of *Friends in Council*. Strahan & Co.

Printed and Published by W. & R. CHAMBERS, 47 Paternoster Row, LONDON, and 339 High Street, EDINBURGH. Also sold by all Booksellers.